



Watching and Recording TV

User Guide

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1 Safety

Configurations may vary. Cables and adaptors may be sold separately. Internet service and any routers required are sold separately. For more information refer to the Safety and Regulatory Information in the User Guides folder. Click [Start, All Programs](#), and then click [User Guides](#).

- △ **WARNING!** Please read “Additional Safety Information” in the *Limited Warranty and Support Guide* before installing and connecting your computer to the electrical power system.

WARNING! Take the following precautions to reduce the risk of electrical shock or damage to your equipment.

Do not disable the power cord grounding plug. The grounding plug is an important safety feature.

Plug the power cord into a grounded (earthed) outlet that is easily accessible at all times.

Disconnect power from the equipment by unplugging the power cord from the electrical outlet. To prevent direct exposure to the laser beam, do not try to open the enclosure of the CD or DVD drives.

WARNING! The computer may be heavy; be sure to use ergonomically correct lifting procedures when moving the computer. To reduce the risk of serious injury, read the *Safety & Comfort Guide*. The guide is located on the Web at www.hp.com/ergo

WARNING! Norway and Sweden only: Cable grounding notice for products with a TV tuner. Your tuner requires that you use a TV tuner isolator (adapter, purchased separately) with your computer to connect a coaxial cable to the TV signal source. Using the TV tuner adapter helps prevent personal injury and computer damage from surges on the coaxial line.

- △ **CAUTION:** Like any other home electronic product, keep the computer away from liquids or a harsh environment that contains excessive dust, heat, or humidity.

For HP TouchSmart PCs:

- △ **CAUTION:** The HP TouchSmart touch screen uses a sensitive touch technology. To avoid damaging the touch screen, do not apply pressure on the front of the display bezel or around the screen borders.

CAUTION: To achieve the best touch sensitivity, keep the screen clean from foreign objects. Avoid excessive dust accumulation on all sides of the screen.

2 Connecting the TV signal

The TV signal may come from an antenna, a cable TV signal provider, or a satellite TV signal provider. For best results, the TV signal should be connected directly to the computer. If using a set-top box to connect to the computer, additional cables (not provided) may be required.


 **NOTE:** The location and number of connectors for the TV signal may vary by model.

NOTE: The Television (Electronic) Program Guide is not available in all countries/regions.

Your computer may not include all the cables needed for the television setup. You may need to purchase cables, a coaxial signal splitter, or other accessories separately.

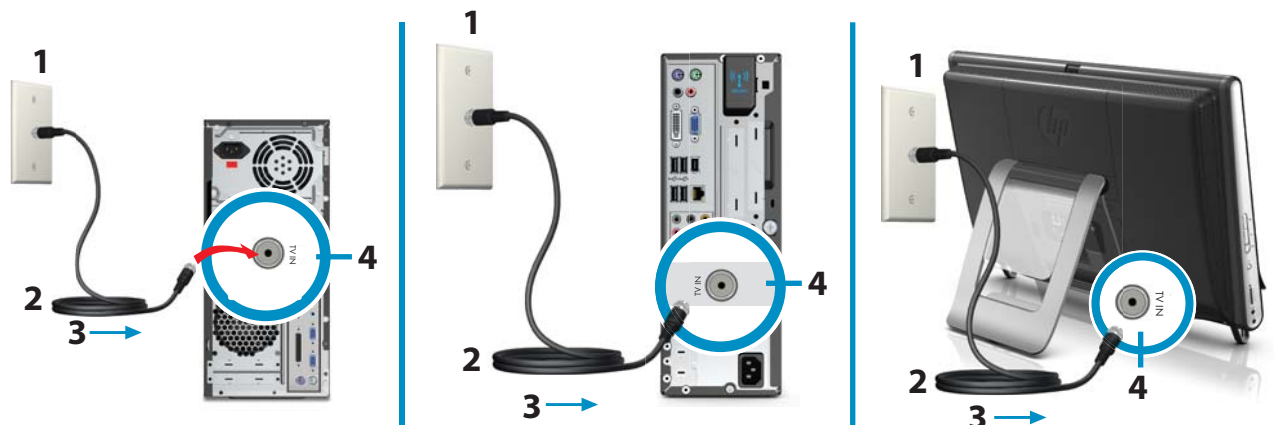
For more information about TV signals and TV tuners, see the Microsoft web site: www.microsoft.com and click **Windows 7** and then type `tv tuner` in the search bar.

Connecting TV signal directly to computer

 **NOTE:** The location and number of connectors may vary by model.

Connect the coaxial cable from your TV antenna or TV signal provider directly into the computer. The TV signal is either an analog cable or digital antenna signal.

1. Determine the location of the TV In or TV Input connector (4) on your computer. The location of this connector varies by computer.
2. Plug the connector of a coaxial cable (2) from your TV antenna (1), or TV signal provider, to the TV In or TV Input connector (4) on the computer.
3. Turn the connector to tighten it.



1	Cable or TV antenna signal
2	Coaxial TV cable
3	Signal
4	TV In connector

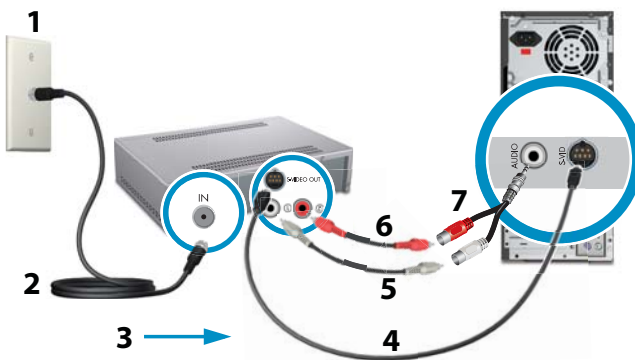
Connecting to a set-top box

Satellite TV and some cable TV service providers require a set-top box; the computer must be connected to the set-top box to receive the TV signal.

S-video

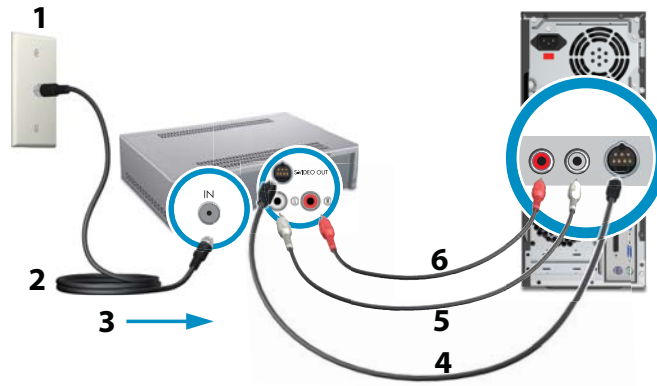
 **NOTE:** The location and number of connectors may vary by model.

1. Plug an S-video cable (4) into the S-video In connector on the computer. Plug the other end of the S-video cable into the set-top box.
2. Plug the audio cables (5, 6) from the set-top box into the Audio In right (red) connector and the Audio In left (white) connector on the computer. If your computer uses a single audio input, use a Y cable (7) to combine RCA left and right channels (white and red).

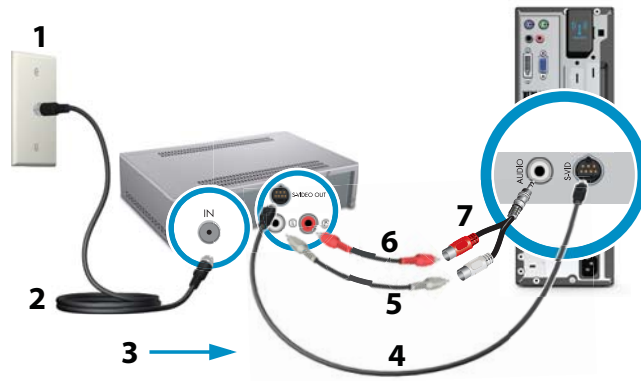


1	Cable or TV antenna signal
2	Coaxial TV cable
3	Signal
4	S-video cable
5	Audio In left cable (white)
6	Audio In right cable (red)
7	Y audio cable

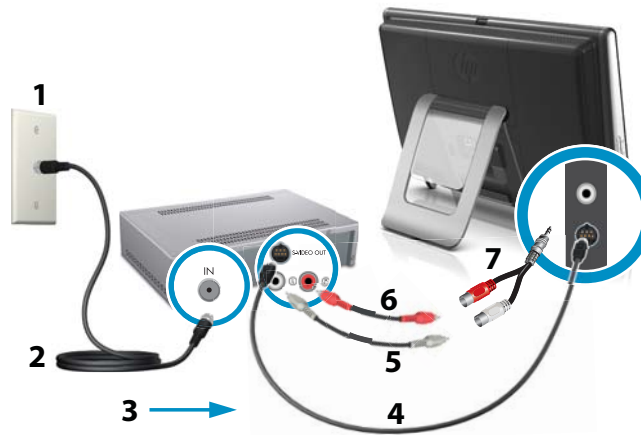
Alternate S-video configuration 1



Alternate S-video configuration 2



Alternate S-video configuration 3



Composite video

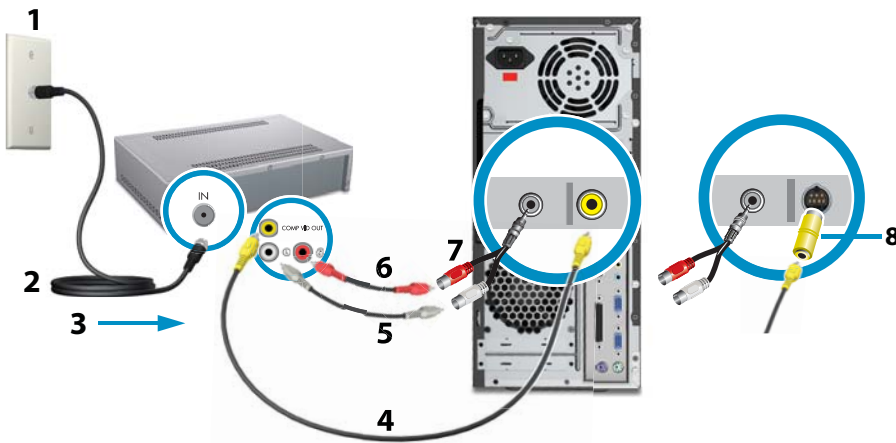
 **NOTE:** The location and number of connectors may vary by model.

1. If the computer has a Composite Video In connector, plug a composite video cable (4) into the Composite Video In connector on the computer. Plug the other end of the composite video cable into the set-top box.

-or-

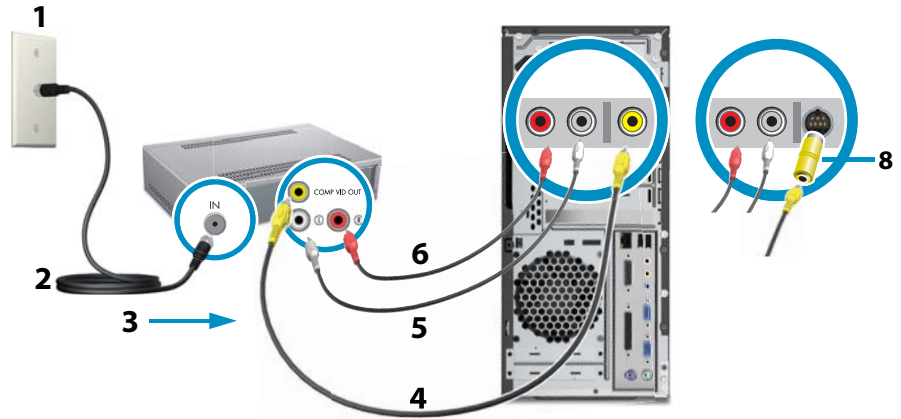
If the computer has an S-video In connector, plug the composite video cable (4) into a composite/S-video adapter (8) to connect to the S-video In connector. Plug the other end of the composite video cable into the set-top box.

2. Plug the audio cables (5, 6) from the set-top box into the Audio In right (red) connector and Audio In left (white) connector on the computer. If your computer uses a single audio input, use a Y cable (7) to combine RCA left and right channels (white and red).

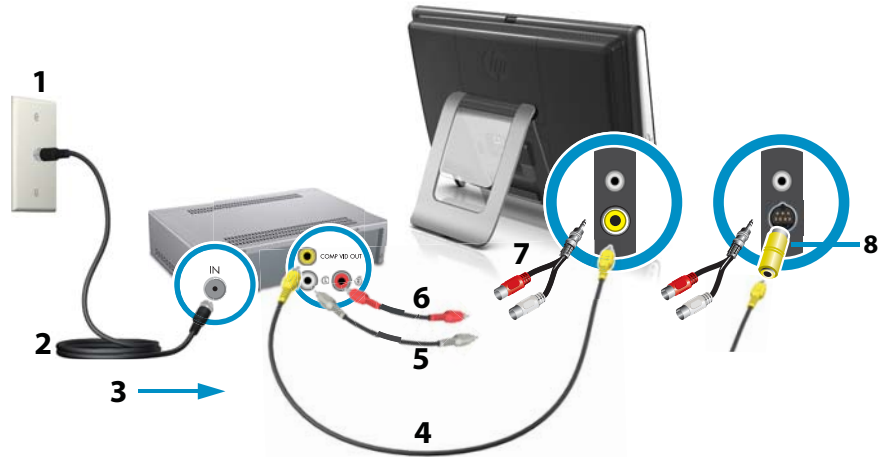


1	Cable or TV antenna signal
2	Coaxial TV cable
3	Signal
4	Composite cable
5	Audio In left cable (white)
6	Audio In right cable (red)
7	Y audio cable
8	S-video/composite adapter

Alternate composite video configuration 1



Alternate composite video configuration 2



Using infrared (IR) devices

Your computer may have a built-in IR receiver, or IR extender cable that connects to your computer. To determine which type of IR receiver is installed on your computer, see additional documentation that came with your computer.

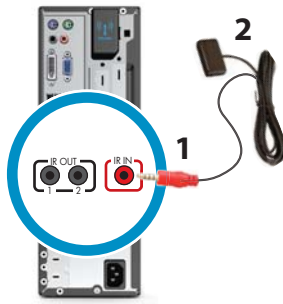
Built-in receiver

Some computer models include a remote sensor (IR receiver) that is located on the front of the computer. For more information about this internal remote sensor, see the other documentation that came with your computer. The remote control works with this sensor.



External IR devices

1. Connect the IR extender cable (red connector) (2) into the IR IN port (1) on the computer.
2. Some external IR devices (3) connect to the computer with a USB connector (4).

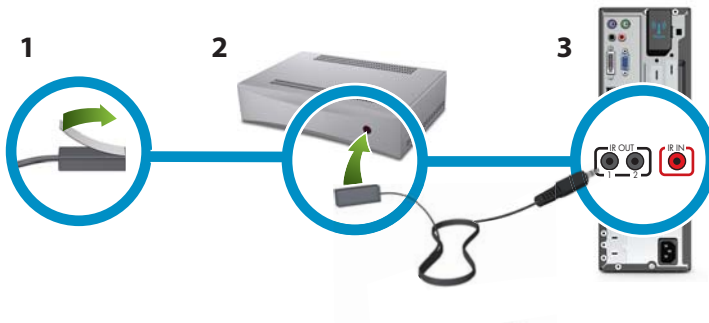


- | | |
|---|--------------------|
| 1 | IR IN port |
| 2 | IR extender |
| 3 | External IR device |
| 4 | USB connection |

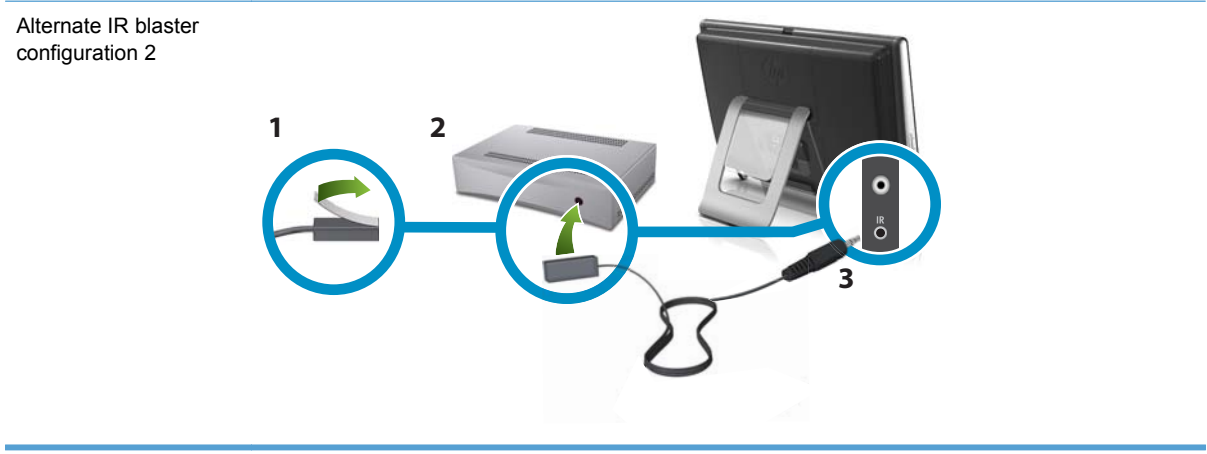
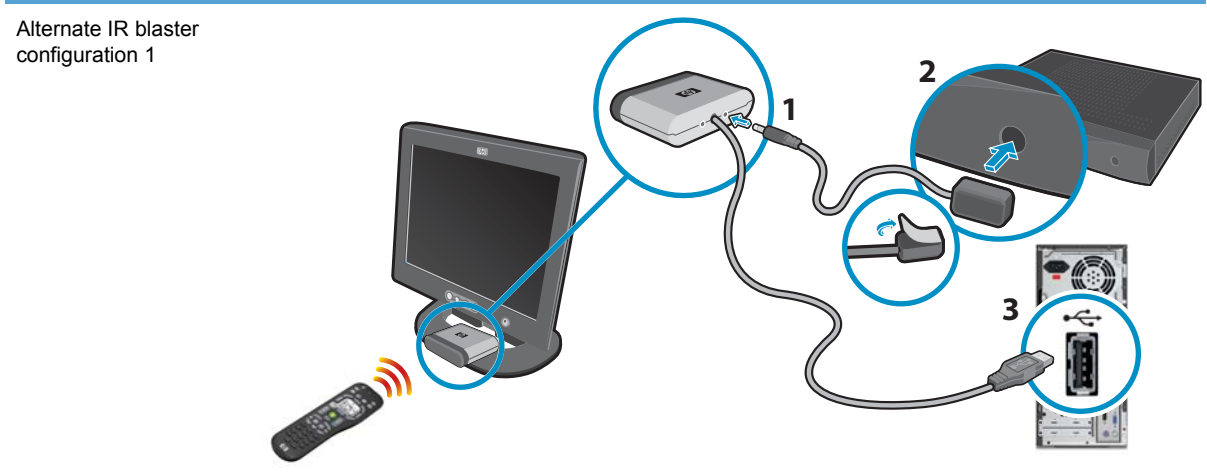
Using an infrared (IR) blaster

If you have a cable TV or satellite TV set-top box, you can control the set-top box from the computer by connecting the remote control sensor cable/IR blaster to the computer. IR emitters (blasters), IR extender cables, and IR receivers are used to allow the remote control to communicate with a computer that uses a set-top box to obtain a TV signal.

1. Remove the tape (1) on the end of the IR blaster cable and adhere it to the IR sensor (receiver) on the set-top box (2).
2. Connect the IR blaster cable to the IR OUT connector (3) on the computer.
3. Point the remote control at the remote sensor on the front of the computer.



1	IR blaster
2	Set top box
3	IR connectors — two IR Out connectors (black)



B-CAS card (Japan only)

The B-CAS card (provided by HP) needs to be installed into your computer.

⚠ **WARNING!** Always disconnect the computer from the power source before removing the memory cover or the back cover. Failure to do so before you open the computer or perform any procedures can result in personal injury or equipment damage.

WARNING! Avoid touching sharp edges inside the computer.

WARNING! To reduce the risk of personal injury from electrical shock or hot surfaces, disconnect the power cord from the wall outlet, and allow the internal system components to cool before touching them.

⚠ **CAUTION:** Static electricity can damage the electronic components of the computer or optional equipment. Ensure that you are discharged of static electricity by briefly touching a grounded metal object.

1. Turn off your computer and disconnect the power cord and any other cables connected to your computer.
2. Insert a B-CAS card (provided by HP) into the back of the computer to decrypt high-definition programming. Some models may need to remove the back panel.
3. Connect the coaxial cable from your TV antenna or TV cable provider to the TV In connector located on the back of the computer. The location of the TV In connector varies by model.

Dual tuner (Japan only)

Dual-tuner TV source allows watching a show on one channel while recording another show on a different channel. You can also record two different programs at the same time. The characteristics and requirements for dual-tuner TV source are as follows:

- If you are using a standard cable connector, the signal is routed to both tuners internally.
- If you are using cable or satellite, you must connect a second set of input cables.
- TV sources must be of the same type: either cable TV or satellite TV.
- TV sources must also have identical channel lineups; for example, if you are using two satellite TV sources, they must provide exactly the same channels.
- All TV viewing and scheduling is provided by the Television (Electronic) Program Guide, so both TV sources must have identical television program guides.

3 Using the remote control







- [Remote control buttons overview](#)
- [Teletext access buttons \(select regions only\)](#)
- [Troubleshooting the remote control](#)



























You can use the remote control within Windows Media Center and other programs, to view photos, play music, watch TV programs, and perform many other activities.

- To put the computer into, or out of, Sleep mode press the **On/Sleep** button on the remote control.
- To navigate within the program, point the remote control sensor at the front of the computer, and then press a button on the remote control.



Remote control buttons overview

	On/Sleep — Puts the computer into and out of a power-reduced Sleep mode. It does not turn the computer off.
	Visualization — Displays visual imagery that is synchronized to the sound of the music tracks.
	Music — Opens the Music Library window in Windows Media Center.
	Radio — Opens the FM Radio window in Windows Media Center.
	Guide — Opens the Television Program Guide.
	Recorded TV — Opens the recorded tv window where recorded TV programs are listed.

	Arrows — Move the cursor to navigate and select actions within all Windows Media Center windows.
	
	
	
	DVD Menu — Opens the Play DVD window in Windows Media Center or opens the main menu of a DVD movie, if available.
	Back — Returns to the previous window within Windows Media Center.
	More Info — Displays available information about a selected media file and displays other menus.
	Start — Opens the Windows Media Center main menu.
	Volume — Increases (+) and decreases (-) volume.
	Mute — Turns computer sound off. The word <i>Mute</i> is displayed when Mute is turned on.
	Record — Records a selected television program and stores it on the hard disk drive.
	Play — Plays the selected media.
	Rewind — Moves the media backward at three speeds.
	Skip Backward — Moves media backward 7 seconds or to the beginning of a music track or DVD chapter.
	0 to 9, #, * — Enters text and numbers into a Windows Media Center search or text box. Each time you press a number button, a different character appears. Press the Enter button to select a character.
Clear	Clear — Deletes the last character entered.
	LED — Activity indicator light. The LED tells you that the remote control is emitting a signal when you press a button.
	Print — Prints an item in Windows Media Center.
	Picture — Opens the Pictures Library window in Windows Media Center.
	Video — Opens the Videos Library window in Windows Media Center.
	Live TV — Displays the full-screen view of live TV. Moves a TV program forward to the end of the pause buffer and resumes playing live TV.
OK	OK — Selects the desired action or window option and acts as an Enter key.
	Aspect — Changes the aspect ratio of the display. Zooms in on the picture three times, and then returns to the full-screen aspect ratio.
	Slide Show — Plays a slide show of all the pictures on the hard disk drive.
	Ch/Pg up (+) and down (-) — Changes the TV channels or moves pages up and down, depending on available options. Moves to the next DVD chapter.
	Eject — Ejects a CD or DVD.
	Pause — Pauses audio and video tracks, and live or recorded TV programs.
	Fast Forward — Moves the media forward at three speeds.

▶	Skip Forward — Moves the media forward 30 seconds in videos and live TV, one music track, or one DVD chapter.
■	Stop — Stops the media currently playing.
Enter	Enter — Selects the desired action, menu, or window option.
T	Teletext — Turns Teletext on or off while in Live TV mode. The Teletext page either replaces the live TV picture or is displayed over it. TV sound is still available.

Teletext access buttons (select regions only)

Although Teletext is broadcast free of charge, the TV set must be equipped with a Teletext decoder. Access to Teletext and all of its functions is available through the TV and the Windows Media Center remote control.

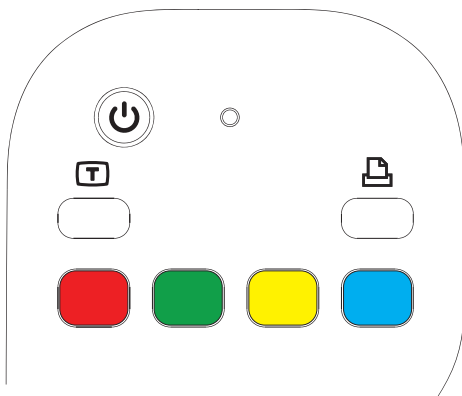
Although the following information should describe the operation of Teletext for most TV sets, functions vary between manufacturers and models. For specific information about your particular TV model, see the documentation that came with your TV.

Teletext consists of pages of free information such as news, sports, financial information, recipes, entertainment listings, holiday advertisements, music and TV reviews, backup information for certain TV programs, and themes for television sets capable of viewing these pages. The Teletext buttons are also used for Integrated Services Digital Broadcasting (ISDB) data functions.

The actual Teletext pages are broadcast in a hidden part of the television signal and decoded by the television. Teletext pages are accessed by a three-figure number; on most channels, the front page is on page 100.

The Teletext access buttons listed below open the main Teletext pages. Each Teletext page has a unique three-digit page number. All pages can be accessed by typing in the number using the numeric keypad on the remote control.

Use the up and down arrows to navigate through the different Teletext pages.



Button	Function
Teletext (Text)	Toggle button to turn Teletext on and off. This button opens page 100, or the home page. The Teletext page completely replaces the TV or Windows Media Center display; however, sound is still available. To return to the TV or Windows Media Center display, press this button again. On some displays, Teletext can be viewed over the display picture.
Red	Opens the red Fasttext shortcut link when display is in Teletext mode.

Button	Function
Green	Opens the green Fasttext shortcut link when display is in Teletext mode.
Yellow	Opens the yellow Fasttext shortcut link when display is in Teletext mode.
Blue	Opens the blue Fasttext shortcut link when display is in Teletext mode.

Troubleshooting the remote control

If the remote control doesn't work:

- Make sure that the batteries for the remote control are charged and installed correctly.
- Make sure the front of the remote sensor (IR receiver) is not blocked.
- If a pressed key repeats itself or sticks, try altering the lighting conditions in the room, moving the location of the remote sensor if this continues.
- Press the [Enter](#) button on the remote control after changing a channel.
- Point the remote control toward the remote sensor, and press a button. A faint light should appear on the remote sensor. If the light appears, then the problem is with the software. Close the software, restart the computer, and open the software again.
- If the remote control works in the software but not when changing channels, you need to reconfigure the software setting for the cable set-top box or satellite receiver.

4 Watching and recording TV

Your computer and Windows Media Center offer several options for watching and recording TV. After physically connecting the TV signal source to your computer, you may use Windows Media Center to set up your computer to receive the TV signal, download the available channels, and set up the TV program guide.

To learn more about the watching and recording TV features available through Windows Media Center go to the Microsoft web site <http://www.microsoft.com> and type Windows Media Center in the search bar.


Watching and recording TV in Windows Media Center

You can watch live TV or record your favorite programs for later playback with a few clicks of the remote control in Windows Media Center. You can use the Television Program Guide to find the program you want to watch or record. You can also record a program while watching another prerecorded program.

The following HP web sites contain topics specific to watching and recording TV for the Windows 7 version of Windows Media Center:

- Recording TV programs in Windows 7:
h10025.www1.hp.com/ewfrf/wc/document?docname=c01896795
- Resolving TV tuner errors in Windows Media Center:
h10025.www1.hp.com/ewfrf/wc/document?docname=c01896780
- Windows Media Center frequently asked questions:
h10025.www1.hp.com/ewfrf/wc/document?docname=c01853749
- Receiving digital TV broadcasts in Windows Media Center:
h10025.www1.hp.com/ewfrf/wc/document?docname=c01589549

Setting up the TV signal in Windows Media Center


1. Press the Windows Start button  on the task bar, and then **ALL Programs**.
2. Click **Windows Media Center**.
3. Locate the Tasks menu and click **settings**.

4. Click **TV** and then **Set Up TV Signal**.
5. Follow the instructions to set up the TV signal for your location and to download the Electronic Program Guide.


For additional information on setting up the TV signal in Windows Media Center, see the Microsoft web site: www.microsoft.com and click **Windows**, click **Windows Media Center**, then browse through the site for instructions and tutorials.

Watching TV in Windows Media Center

From the TV menu, you can search for and play your favorite TV programs. Use the following menu items to help you locate what you want to do:

- **live TV:** Watch, pause, fast-forward, or rewind your favorite TV programs. You can watch recorded TV programs while recording another program (select models only). Use the *i* (More information) button  on the remote control to display TV program information, record the program, zoom, and access TV settings.
- **recorded TV:** View a list of recorded programs by date recorded or title, view a list of programs scheduled to be recorded, find information about a recorded program, play a recorded program, or add a TV recording.
- **guide:** (Not available in all countries/regions) Scroll through the Television Program Guide (Internet service required) to find programs to watch and record. You can record specific TV programs or a whole series.
- **Internet tv:** (Not available in all countries/regions, and Internet service required) Watch Internet TV online shows, movies, and videos.
- **search:** Quickly find a TV program or series to watch or record by entering a descriptive word, program title, program category, movie actor, or movie director.

Watching live TV

1. Press the **Live TV** button on the remote control or click **TV** from the main Start menu. Use the arrow buttons on the remote control to select **live tv**, and then press **OK**. The last channel selected or the first channel available begins playing.
2. Select a channel by using the **Ch+** or **Ch-** button or the numeric keypad on the remote control. The channel number and program information display in the window.
3. Press the More Info button  to open another menu that features the following options and information:
 - Program information, such as channel number and station, title and time period of program, actual time, and a brief summary of the program and TV rating, if available.
 - Record a program.
 - Record a program series.
 - Access to the Windows Media Center Settings window.

4. Press the media buttons on the remote control, such as [Pause](#), [Stop](#), and [Fast-forward](#) to control the playback of live TV.
5. To exit full-screen mode and return to the previous window, press the [Back](#) button on the remote control.

For additional information on watching live TV in Windows Media Center, see the Microsoft web site: www.microsoft.com and click **Windows**, click **Windows Media Center**, and then type `live tv` in the search bar.


Recording TV




Windows Media Center allows you to record the TV programs that you are watching, or you can record a future program or series.

⚠ WARNING! If you turn off the computer, Windows Media Center will not record a scheduled program. The computer must be turned on or be in sleep mode to record a TV program. The computer will not automatically go into a sleep mode if Windows Media Center is open.

Make sure that you put the computer into sleep mode and turn down or mute the volume if, for example, you have a scheduled recording in the middle of the night and do not want to be disturbed.

If you try to schedule a recording and another is already scheduled for the same time, a conflict window appears and gives you the option to record the new program or record the previously scheduled program. If a recording error occurs, the program will not be recorded unless the error is corrected.

To make sure that a program is being recorded, click **TV**, **recorded tv**, and then **View scheduled**. The Record icon  also appears next to the program in the guide while you are recording. The Recording icon disappears when the recording is complete.

Recording Icon	Description
	The Record icon appears in the Television Program Guide next to the program that is scheduled to be recorded.
	The Record Series icon appears in the Television Program Guide next to each occurrence of a program in a series that is scheduled to be recorded.
	The Record Conflict/Error icon appears in the Television Program Guide and the taskbar if another program is scheduled to be recorded at the same time.

For detailed instructions on recording broadcast TV, scheduling recordings using the Television Program Guide, scheduling recordings using Search, or recording a TV series, see the Microsoft web site: www.microsoft.com and click **Windows**, **Windows Media Center**, **Learn More**, and then **Record TV Broadcast**.

Controlling TV playback


The digital video recording functionality lets you record a single program or capture an entire series for later viewing.

When you open the live TV window and begin watching live TV:

- Windows Media Center automatically begins recording and playing back the selected program in the background.
- You may pause or review a live TV program for up to 60 minutes.
- You may replay a program longer than the allotted 60 minutes only by recording the program.

You can return to the live broadcast by pressing the **Live TV** button on the remote control.

When you change the channel, Windows Media Center deletes the previously recorded portion and begins recording again after a short delay.

 **NOTE:** The 60-minute pause buffer applies only when pausing, rewinding, and fast-forwarding live TV.

NOTE: You cannot pause a live TV program, rewind to the beginning of the pause buffer, and then begin recording. You can only begin recording a TV program from real-time live TV as soon as you switch to a channel.

Watching Recorded TV Programs

Click **TV** and then click **recorded TV**. A list of all recorded TV programs displays. Select the program you wish to view.



TV Program Guide

The Electronic Program Guide (Internet service required) is a free service from Microsoft that provides TV listings information, such as channel, network, program title, program summary, and scheduled broadcast times.

- This service is currently not available in some countries/regions.
- Go to www.microsoft.com to find out if a guide is available in your country/region, and for the terms and conditions of the Electronic Program Guide service.

Internet TV

Internet TV allows you to view shows, movies, and videos from the Internet. To access Internet TV from Windows Media Center you must have an Internet connection supplied by an Internet service provider.

1. Press the Windows Media Center Start button  on the remote control, or with the mouse, click the Windows Start Button  on the taskbar, and then click **Windows Media Center**.
2. In the Tasks menu, click **TV**, and then **Internet TV**.

For additional information on watching Internet TV in Windows Media Center, see the Microsoft web site: www.microsoft.com and click **Windows**, click **Windows Media Center**, and then type **Internet TV** in the search bar.

Watching and recording TV in HP TouchSmart

HP TouchSmart Live TV lets you watch local TV and cable content on your PC (a TV tuner card is required). The Live TV tile contains an electronic programming guide for the available TV stations. You can also record TV broadcasts for later viewing.

Setting up the TV signal

1. Select **Live TV**, **Settings**, **Setup**, and **Setup New TV Tuner & EPG**.
2. Follow the instructions for setting up the TV stations available in your area.

Watching Live TV

1. Select **Live TV**.
2. A list of channels displays.
3. Select the channel you wish to view.

Recording Live TV

1. Select the TV program you want to record from the list of channels.
2. Press the red button on the screen to begin recording the TV program.

Setting Live TV to record a future broadcast

1. Select **Live TV** and then **Recording**.
2. Select **Add New Recording**.
3. Select the **channel**, **date**, and **time** for the program you want to record and select **Set**.

Watching Recorded TV programs

1. Select **Live TV** and then **Recording**.
2. View the list of recorded programs and select the one you wish to view.

For additional information about Live TV in HP TouchSmart, see www.hp.com/supportvideos (English only).

Media copy protection

Copying and distributing media content (such as DVDs or TV programs) might be restricted by copyright owners. Such restrictions protect copyrighted media files from being illegally copied and used. If you try to record a program that contains such restrictions, the following message appears: **Recording Canceled. Manual Recording cannot be recorded.** Restrictions that are set by the broadcaster and/or originator of the content prohibit recording of this program. When you record certain music or video files, they might retain copy-protection restrictions that will prevent copying or distribution, including technology that encrypts media content and/or limits access only to people who have a license to play the content.